DOCUMENT RESUME

ED 155 822 95 EA 010 735

AUTHOR Csikszentmihalyi, Mihaly; Larson, Reed

TITLE Intrinsic Rewards in School Crime.

INSTITUTION National Council on Crime and Delinquency, Hackensack, N.J. NewGate Resource Center.
SPONS AGENCY Department of Health, Education, and Welfare, Washington, D.C.
PUB DATE Feb 78
NOTE 38p.; Chapter 7 of "Theoretical Perspectives on School Crime, Volume I"; For other papers in this volume, see EA 010 729-768

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS Behavior Theories; Change Strategies; Complexity Level; Creative Expression; *Delinquent Behavior; Disadvantaged Youth; Elementary Secondary Education; Novelty (Stimulus Dimension); *Rewards; School Design; *School Environment; *School Vandalism; *Self Actualization; *Student Motivation; Violence

ABSTRACT

One of 52 theoretical papers on school crime and its relation to poverty, this chapter deals with the intrinsic motivation that the systemic structure of a school provides for opportunities for both prosocial and antisocial behavior. On the basis of previous research, the authors propose that the state of enjoyment occurs when a person is challenged at a level matched by his or her level of skills. According to the model, the experience of meetable challenges requires the perception of a constrained set of possible actions, clearly defined goals, and opportunities for unambiguous feedback. Ideally, learning should involve systemic involvement in sequences of challenges internalized by students. However, evidence indicates that such involvement is rare and is often subverted by the school itself. In the absence of such opportunities, antisocial behavior provides an alternate framework of challenges for bored students. Disruption of classes, vandalism, and violence in schools are, in part, attempts of adolescents to obtain enjoyment in otherwise lifeless schools. Restructuring education in terms of intrinsic motivation would not only reduce school crime, but also accomplish the goal of teaching youth how to enjoy life in an affirmative way. (Author/MLF)

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INTRINSIC REWARDS IN SCHOOL CRIME

Mihaly Csikszentmihalyi and Reed Larson

The University of Chicago

A paper from
"Theoretical Perspectives on School Crime"

Submitted to
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
February 1978

Submitted by
NATIONAL COUNCIL ON CRIME AND DELINQUENCY
Hackensack, N.J.

EA 010 735

ABSTRACT

The systemic structure of a school provides opportunities for both prosocial and antisocial behavior. Actions in a school may be motivated by (1) the extrinsic mechanisms of discipline and grades, (2) the means-end relationship of school behavior to students' long-term goals, and/or (3) the immediate intrinsic satisfactions obtainable in different activities. This paper deals with the third type, intrinsic motivation. On the basis of previous research, the authors propose that the state of enjoyment occurs when a person is challenged at a level matched to his/her level of skills. According to the model, the experience of meetable challenges requires the perception of a constrained set of possible actions, clearly defined goals, and opportunities for unambiguous feedback. The system of rules in a formal game provides these prerequisites. The systemic structure of a school can also provide the conditions of enjoyable involvement. Ideally, learning should involve systemic involvement in sequences of challenges internalized by students. However, evidence indicates that such involvement is rare and is often subverted by the school itself. In the absence of such opportunities, antisocial behavior provides an alternate framework of challenges for bored students. Disruption of classes, vandalism, and violence in schools are, in part, attempts of adolescents to obtain enjoyment in otherwise lifeless schools. Restructuring education in terms of intrinsic motivation would not only reduce school crime, but also accomplish the goal of teaching youth how to enjoy life in an affirmative way.

Enjoyment and the Survival of School Systems

The problem of school crime can be conceptualized at the most abstract level as a systemic problem. Each school is a social system which exists insofar as it can place appropriate constraints on the behavior of persons who are part of the system; to the extent it is unable to constrain the relevant behavior of students, its existence as a functioning system is in jeopardy.

Like any other social system, schools can survive only as long as people are motivated to act according to patterns of constraints which characterize the behavior complex we call the school. Unless the community is motivated to pay taxes, the teacher to teach, the janitors to keep the plant in order, and the students to abide by the rules of behavior required to make learning possible, institutions of learning will cease to exist.

In this context we are interested primarily in the students' lack of motivation to accept the constraints of school systems. This lack translates in practice into the phenomenon of school crime, as manifested in acts of vandalism, burglary, larceny, assault on other students and on teachers, and so on (U.S. Senate Sub-

committee on the Judiciary, 1975). The question is why increasing numbers of students act to subvert the systemic constraints which make the existence of schools possible (Marvin, McCann, Connolly, Temkin, & Henning, 1976). We shall approach this issue from the viewpoint of motivation theory.

People accept the constraints of a social system for one of three possible reasons, or combination thereof. In the first place, a system may compel constraint through a combination of extrinsic rewards and deterrents. The "stick-and-carrot" mechanism of social control works by convincing persons that their survival or comfort is best served if they accept the system's constraints. Schools rely on grades for rewards, and on various disciplinary measures for deterrents to obtain compliance, and in this they are supported by the more informal social controls embodied in public opinion and especially parental attitudes.

A second set of reasons why students may accept the constraints of school (and thereby in effect will become part of the system) has to do with the perceived means-end relationship between their present belonging in the system and their future achievement of a desired goal. As long as students believe that by being "good students" they get closer to valued statuses -- of

financial affluence, power, self-esteem -- they will be motivated to comply with the constraints of the school. Extrinsic and means-end reasons are presumably orthogonal; at least theoretically they are independent of each other.

The third and final group of reasons that may motivate a person to belong to a system, and thereby lead him to accept its constraints, is the one under the rubric of "intrinsic motivation." When people enjoy the activity which a system makes possible, they spontaneously abide by its constraints. For instance, basketball as an action system requires the development of certain skills, observation of specific rules both on and off court. These constraints are usually accepted by young people even in the absence of extrinsic rewards or deterrents, and even though playing basketball will not help them to reach a desirable future goal. The activity becomes an end in itself because it provides an immediate experience which is intrinsically rewarding.

The increase in school crime could be attributed to failures in any and all of these three motivating systems. It could be argued that the extrinsic reward-punishment mechanisms which used to keep students more

or less in line are becoming less effective. Or it could be argued that for an increasing number of students the means-end relationship between education and desirable future goals is becoming less believable. Both of these arguments are probably sound. But here we shall focus on the third possibility, which is usually ignored: that schools are less fun, that intrinsic motivation for becoming educated is decreasing, that "criminal" activities are providing more enjoyment to students than what schools have to offer.

It is unwise to dismiss people's need for enjoying what they do with the derogatory label of short-run hedonism, which is a favorite concept of scholars studying delinquency (Strodtbeck & Short, 1964; Cohen, 1970). It might be better to recognize that, lacking clear extrinsic or means-end motivational supports, the most functional response for a person is to do what is most enjoyable. Thus if we wish students to accept the rules on which schools are based, we need to understand what students enjoy, so that schools may provide the kind of intrinsically motivating experiences which now are being sought out in contexts disruptive to the school system. This approach is certainly not new. Almost 24 centuries ago Plato

recognized that the main goal of a sound education is to train people to find "pleasure and pain in the right objects" (Laws, II; see also Aristotle, Ethics, II, 3). It is all the more surprising how little headway we have made in translating this goal into actuality.

Crime and Enjoyment

School crime takes place when a person acts in terms of the constraints of an antisocial system rather than the constraints of the school system. At that point he is, in effect, identifying himself through his actions with a criminal system; he ceases to belong to the system "school." In the recent literature, this decision is usually explained in terms of delinquent subculture pressures placed on the person (Sutherland & Cressey, 1974; Cohen, 1955): a student resorts to criminal action in order to gain or keep his status in a peer group.

There is no question that socialization into a deviant subgroup is an important reason for rejecting the school's constraints. However, to understand why a person will choose to identify with a deviant system, it is necessary to explain the motivation for delinquent action. The argument proposed here is that part of the motivation for crime is intrinsic; in other words, that

for many adolescents criminal acts are more enjoyable than behaviors available in socially sanctioned settings. Unless we understand why this is so, we will be unable to build intrinsic motivation into school activities, and therefore we will lose the most efficient deterrent to antisocial behavior that a social system can have.

The fact that delinquency, at least in its early stages, is an enjoyable activity has been noted by many observers. Thrasher (1936) thought stealing the result of a "sport motive" rather than desire for material gain; McKay (1949) saw in delinquency a form of play; Tappan (1949) concluded that "the juvenile property offender's thefts, at least at the start, are usually 'for fun' and not for gain." More recently, the same conclusion was reached by Cohen (1970): "In homelier language, stealing 'for the hell of it' and apart from considerations of gain and profit is a valued activity to which is attached glory, prowess and profound satisfaction." Intrinsic motivation presumably plays an even larger role in affluent suburban school crime. In a study conducted by Tobias (1970), for example, middle and upper middle class offenders mentioned boredom as a major reason for engaging in delinquent acts, while they

usually discounted the need for money as a contributing factor. The desire for kicks, excitement, adventure, pleasure, fun was the overwhelming reason for their acts given by delinquents.

Despite the fact that many researchers have recognized the role enjoyment plays in deliquency, the connection between the two has not been thoroughly investigated. This is at least in part due to the lack of a viable theory of enjoyment, and to the widely shared assumption that only youth with peculiar personality traits enjoy crime. The purpose of this paper is to present a general theory of enjoyment, and to argue that criminal acts are perfectly suited to provide enjoyment to normal individuals who lack access to alternatives.

A Theory of Enjoyment

In the past decade, there has been a resurgence of interest in the topic of intrinsic motivation. Two partially converging theoretical approaches have been most influential in explaining the sources of the enjoyment people derive from certain activities. The first approach, based on the neuropsychological models of Berlyne (1960), Hebb (1965), and Hunt (1965) assumes that there is an optimal arousal level which the organism

seeks to maintain. When stimulation is too monotonous, a person will be motivated to vary environmental input; when stimulation is excessively varied, the motivation is to reduce input variability. A person in the optimal arousal range will find the experience intrinsically rewarding (Ellis, 1973; Hutt, 1970).

A second approach with wide currency has grown out of the work of White (1959) and de Charms (1968, 1976). The emphasis here is on the concept of competence, control, personal causation. If a person perceives his or her acts as being voluntary, the action will be experienced as qualitatively different from acts which are perceived to be controlled by an outside agency. When action is attributed to extrinsic causes, then, extrinsic contingencies are necessary to sustain it. Recent work by Kruglanski (1975), Lepper and Greene (1975), and others (Greene & Lepper, in press) has shown the power of intrinsic motivation in experimental settings, and at the same time it has demonstrated how fragile such motivation is: an enjoyable activity can be transformed into a chore just by a few cues which suggest to the person that his actions are controlled from outside.

Arousal theories of enjoyment are based on neurological explanations, while the personal causation

approach attacks the problem at a different level, that of a person reflecting on his or her actions, and making attributions about their causality. There is no necessary conflict between the two theories, since they focus on phenomena of different levels of complexity. The first is relatively more molecular, the second more molar. In any science one finds alternative explanations based on differences in the level of approach, and such explanations tend to be complementary rather than mutually exclusive. Both theories have numerous implications for making the school environment intrinsically motivating, and thereby reducing behavior which conflicts with the systemic requirements of the institution.

A third model of enjoyment, which is in some respects a synthesis of the two mentioned above, has been developed by the author (Csikszentmihalyi, 1975a, 1975b, 1976a, in press). It will be summarized here, and its relevance to the problem of school crime will be examined in detail.

In a series of studies begun four years ago, we interviewed several groups of people who devote much time and energy to activities that have few extrinsic rewards and lead to no future goal: chess masters, rock climbers, dancers, athletes, and so forth (Csikszentmihalyi, 1975b). Their description of how it feels to engage in these

activities agreed on a few central points, leading to a theory which describes the experience of enjoyment and its preconditions.

Briefly, an activity seems to be enjoyable when a person perceives that his or her capacity to act (or skills) match the opportunities for action perceived in the environment (or challenges). In this balanced state of interaction -- which appears to be the subjective counterpart of the optimal arousal state -- people find themselves in a peculiar dynamic experience which we have called the flow state.

Flow is described as a state in which one concentrates on the task at hand to the exclusion of other internal or external stimuli. Action and awareness merge, so that one simply does what is to be done without a critical dualistic perspective on one's actions. Goals tend to be clear, means are coordinated to the goals, and feedback to one's performance is immediate and unambiguous. In such a situation, a person has a strong feeling of control -- or personal causation -- yet, paradoxically, ego-involvement is low or nonexistent, so that one experiences a sense of transcendence of self, sometimes a feeling of union with the environment. The passage of

time appears to be distorted: some events seem to take a disproportionately long time, but in general hours seem to pass by in minutes.

The flow experience is why games, creative activities, and moments of religious ecstasy are so enjoyable as to be intrinsically rewarding. But the main contribution of our research has been to suggest that all kinds of serious, work-related activities can also produce flow, and therefore be intrinsically rewarding.

Physicians claim that performing surgery is "addictive" for essentially the same reasons that rock climbers find climbing or gamblers find poker addictive: because it is an action system where challenges and skills are balanced, goals are clear, feedback is immediate, relevant stimuli can be clearly separated from irrelevant ones, and as a result the flow experience ensues (Csikszentmihalyi, 1975b). Similar accounts were obtained from mathematicians describing the intrinsic satisfaction of working with numbers (Halprin, in progress) and from high school students discussing their favorite courses (Mayers, 1977).

Games are institutionalized action systems which provide the flow experience. The rules of a game define

a constrained set of possible actions. Within these constraints a person chooses a course of action directed toward a clearly specified goal. This demand for choice (and execution) of strategies is the challenge of the game. The possibility of choosing a better or worse move is dependent on the fact that other players are also subject to constraints and thus their behavior is to a degree predictable. The actual and potential responses of other players structure each participant's challenges. In the ongoing actions, he/she gets immediate, unambiguous information about his/her positions, permitting him/her continually to change and shape the course of play. Good games allow participation at many levels of skill. A person can start out playing chess at a very simple level and gradually progress to highly complex strategies. Provided one can find players with matched skills, games offer a progressive hierarchy of challenges that can keep a person absorbed for a lifetime. It is these systemic properties -- clear constraints, goals, feedback, predictability, and graduated challenges -- which make surgery and chess, rock climbing and mathematics intrinsically rewarding, by producing the experience of flow.

In the absence of these properties, activities become

boring, frustrating, or anxiety-provoking. Workers who get no feedback on the quality of their efforts quickly become uninterested. If there are no challenges in a situation, boredom is virtually inevitable.

Flow and its lack are not characteristics of the physical environment, but of the person's interaction with it. While the objective environment makes it easier or harder to achieve systemic interaction, the balance of skills and challenges necessary for flow ultimately depends on the person's perception of what the skills and challenges are. For example, loud noise hinders the concentration needed for maintaining flow, but it does not make flow impossible for those who can disregard it. We are currently studying large numbers of workers in industrial and clerical settings. Many of them find their jobs boring and unchallenging. But others, who are in every other respect similar to the first group, look on the same jobs as stimulating and enjoyable. The two groups appear to differ only in that persons in the latter group have an ability to restructure their tasks and create personal challenges which make work intrinsically rewarding.

While it is true that it is a person's attitude that determines whether an activity is intrinsically rewarding, the contribution of the environment should not be disregarded. It is easier for people to experience flow in a game than in a dentist's waiting room, and most people would perceive fishing as more enjoyable than working on an assembly line.

It is important to realize that the flow experience, while personally rewarding, is socially neutral. Like physical energy, it can be used for productive or destructive ends. Battle veterans, for example, often describe front-line war experiences with nostalgia, as the time of their lives when they felt most intensely alive. Warfare is an excellent flow activity because it provides clear goals, unambiguous feedback, total involvement, and potentially matched challenges and skills. Despite the fear and misery it also generates, war simplifies the life of many men to the point that it overcomes its own drawbacks and becomes intrinsically rewarding.

In general, physical competition seems to be the

most prevalent ingredient of flow-producing activities, both for participants and for spectators. From the Balinese cockfight (Geertz, 1973) and the Spanish bullfight to football, hockey, roller derby, and boxing, violent confrontations provide the most easily understood match between challenges and skills, the clearest goals, the most immediate feedback. One needs practically no training to become involved in an aggressive episode, either as a participant or a spectator. While it takes specialized training to act in a symbolic confrontation like chess, or to respond to noncompetitive challenges, it takes no special skill to see the challenge of a confrontation and to act in a setting that requires violence.

It is for this reason, presumably, that so many of young children's flow experiences involve violent or destructive acts. Fighting with peers (or with parents) is one of the most available flow activities for children. Challenges and skills are at hand; goals and feedback are clear. Children who learn no other skills or see no other opportunities for action find in violence and destruction a ready source of enjoyment. By the same token, one would expect that grown-ups whose efforts to find flow in more complex forms are frustrated will

regress to simpler forms. The pain on the face of a man in the arena is the most basic and universal sign that something important is happening, and for many people -- the bored and the worried -- it is one stimulus that can lead into the flow experience.

Conversely, the main goal of a truly civilized education is to teach children to experience flow in settings that are not harmful to self and others. This is again the goal Plato set out for his own educational system: to teach youth how to find pleasure in action which strengthens the bonds of human solidarity instead of weakening them. Most subjects taught in schools are "synergistic" (Maslow & Honigmann, 1970), in that they are symbolic skills which serve to unite people rather than set them against each other. But, unfortunately, school activities often fail to provide flow experiences, so students do not get intrinsically motivated to take part in them. And, all too often, the only source of flow that students find is the negative opportunity to hurt or destroy. The mechanism of this process is what one needs to examine in more detail next.

Flow and School Crime

From the point of view of intrinsic motivation, schools are engineered all wrong. To paraphrase a point

made by Shore (1971), the wonder is not why some students commit crimes, but rather why so many do not. The manifest function of schools is to teach youth a set of abstract skills which are supposedly useful in performing adult roles in society. To students, the goals of the school should appear as challenges. Learning math, learning biology, etc., are the challenges that schools ostensibly present to the students. Quite often, however, these challenges are not matched to the students' skills. In a recent pilot study (Mayers, 1977) in which a group of students wore electronic paging devices for a week and filled out a short questionnaire whenever the pager beeped, high school students rated 34 percent of their classes as presenting them with more challenges than they could handle and 26 percent of their classes as presenting challenges lower than their skills. Only 40 percent of all classes were rated near the optimum level of balance between skills and challenges. Their favorite activities (which ranged from drama to basketball), were rated at the optimum balance a much higher proportion of the time. In another study (Csikszentmihalyi, Larson, & Prescott, 1977), teenage students consistently rated themselves as more bored in school than in any other setting. Unpublished data from this research showed that

students reported thinking about school-related activities while in class for less than half (45 percent) of the time. Typical unrelated topics of thought were "my boyfriend," "going to sleep," "how my hair looks," "how much I hate Mrs. Green," and "how soon the bell would ring and release me from this boredom." Among topics of thought related to the overt class situation were the following: "how hard this is" and "what word I could make to give me points."

Occasionally, some intrinsically motivated learning occurs under these conditions. In some cases the skills of the teacher and the skills of some students mesh, creating a situation where they provide an optimal challenge to each other. But the knowledge level of teachers (their skills in the activity) is typically so far above those students that balanced systems of reciprocal challenges are rare. Most learning in schools is motivated by the economy of extrinsic sanctions and rewards.

Unfortunately, these extrinsic sanctions and rewards, upon which the school is based, are destructive to any intrinsic motivation that still exists. Research shows that persons who initially do things because they find them satisfying lose this intrinsic motivation when

extrinsic motivators are introduced (Deci, 1975; Greene & Lepper, in press; Kruglanski, 1975). The feeling of personal causality is subverted. Thus, schools tend to destroy any enjoyment in learning that may already be there.

The inability of schools to provide engaging action systems helps to create bored, frustrated, dissatisfied people. Lacking opportunities for enjoyable involvement through school, they seek alternate structures of challenges to obtain flow experiences. Our research in progress suggests that the frequency of delinquent acts reported by secondary school students is inversely correlated with the level of challenges they perceive in school ($r = -.43, p < .05$), while there is no relationship to the level of challenges perceived out of school. Delinquency appears to be one system of opportunities for action that is an alternative to the action systems of the school.

These findings suggest not only that challenges and skills are often mismatched in school, which is almost unavoidable in a mass educational system, but that some students do not perceive what the school has to offer as challenging at all. The paradox is that the abstract, symbolic tasks provided in academic settings

can be seen as challenges only by persons who have enough abstract, symbolic skills to act within that system of action. To those who develop the curriculum, math problems and history quizzes are real, but to most students they are not. They are not seen as challenging, except as artificial obstacles to be circumvented. This is true even of highly intelligent, motivated students. An outstanding fourth-grader we asked about the most special event in his school year told with obvious animation of the time he was sent by his teacher to take the pupils' milk money to the principal's office. Of all the things he did in class all year, this event stood out as the most exciting, the one involving concrete responsibility in a real situation. This example is quite typical (Goodman, 1964; Holt, 1969). Children and adolescents rarely get completely involved in academic subjects. They find heightened experiences in those activities where they can recognize the challenge and match it with their skills. These tend to be interpersonal encounters, mostly involving peers, or the more concrete subjects taught at school, such as gymnastics, music, or art.

Adult ambivalence concerning the usefulness of specific academic subjects does not make it any easier for a student to recognize them as meaningful challenges.

As Jules Henry (1963) pointed out, our culture tends to convey conflicting messages about the validity of scholarly pursuits. About the only subjects which are wholeheartedly endorsed by most communities are athletics for boys and the glamour-consumer role taught in home economics classes for girls. Not surprisingly, these challenges will seem real to a majority of adolescents, and, as a result, many of them will experience flow only in settings that involve glamour or competitive athletics.

Yet most of the time in school is spent in activities which students cannot structure as flow experiences. Boredom and worry, rather than the sense of total involvement and peak performance, are the characteristic states of many students. "As a result," writes Bronfenbrenner (1973, p. xxv), "the schools have become one of the most potent breeding grounds of alienation in American society."

Antisocial Action Systems

In the prototypical crime movie, high suspense is created as the protagonists execute an elaborate plan for committing the crime. The elements of the situation they are dealing with (the bank, the watchman, the timetable) are never quite entirely predictable and thus produce in the viewer a sense of excitement and vicarious

challenge. But the possibility of the plan and the crime exists only because of the predictability of the system that is about to be subverted.

In a similar fashion, a school provides a predictable structure of actions and possible reactions. More and more high schools are becoming mechanical systems ruled by constraints on timing, location, and behavior. The similarity between schools and jails is becoming ever more pronounced. In such a system, for many students the only way to experience the self-determining state necessary for enjoyment is to disrupt its rules. Only because the order is there does the opportunity for disruptive behavior come into being. A student can subvert the order in a class session, the physical order of the building, the general control of the teachers, and the authority of the principals. Each provides a challenge to someone who is unable to find enjoyment within the constraints of the system.

At the simplest level, inserting wisecracks into a teacher's lecture provides a diverse and stimulating challenge. The immediate goal is to draw laughter without being so inappropriate as to get thrown out of the classroom. If one is skillful one can progressively get away with more and more, as one builds an alliance

with other members of the class. The teacher's authority is gradually weakened until he or she loses control of the class. But this destroys the action system, because there is no more order to disrupt. As with other parasitic interactions, the intruder must learn to moderate disruptive effect lest it destroy its host system.

This classroom drama may be played out on a different dimension of skills. The less verbally clever student may seek to achieve control of the situation through emotional combat. His challenges may involve exceeding the teacher in stubbornness, generating fear, being attuned to moments of vulnerability, and overcoming the class order by force of will. This is a game of emotional control which involves the danger of tipping into physical violence. Similar escalating emotional duels may be played out with other students or with principals.

These opportunities for antisystem enjoyment involve competitive interactions. The skills of the teacher are the challenges of the student and vice versa. If the teacher is skilled, he or she can maintain control and experience the satisfaction of teaching. But if the student is more skilled or if several students join

together, they may take the upper hand and have the satisfaction of control. The antisystem students have an advantage in that they can choose from any number of disruptive strategies. But, with experience, a teacher develops a repertoire of counterstrategies, from exploiting his own alliance with other class members to dismissing students at the first hint of disruptive behavior.

The frequent school crimes of theft, vandalism, and arson represent other levels of challenge for antisystem students. To say that vandalism results from negative attitudes toward the school (Goldman, 1961) does not explain why the actual event took place. Anyone who has ever looked at a bathroom wall recognizes that the interest of graffiti writers is more than simple destruction. Similarly, one notices that it is not always the easiest windows to hit that get broken. We need to recognize that all the obstacles which must be overcome in stealing or in starting a fire make these acts great adventure, of the sort Tom Sawyer and his gang cherished.

We have presented only a suggestive overview of possible challenges for antisystem behavior that exist in schools. It is not suggested that antisocial action systems can keep a student in a continuous state of enjoyment, nor that this type of action will be intrinsically

motivating to everyone. But when few other options are available, these provide viable alternatives. A beginner needs few skills and he can find gradual challenges which provide new opportunities as his skills develop.

Implications for the Reduction of School Crime

There are several strategies society can adopt in an effort to reduce school crime. One solution is to strengthen the set of contingencies which affect the extrinsic motivation of students, by increasing security measures, enforcing heavier penalties, and providing stronger inducements for prosocial behavior. This approach will almost surely work, but it has some drawbacks. In terms of cost-benefit accounting, it is rather expensive. It requires a cumbersome machinery of deterrence and prosecution; conversely, it requires the expense of bribing young people to do what they ought to be eager to do naturally. More serious in terms of long-range effects would be the destruction of intrinsic motivation engendered by greater reliance on extrinsic contingencies. The more school relies on coercion and inducements to have students accept its constraints, the more students will see schools as systems where voluntary participation and hence intrinsically motivated behavior

is impossible. Schools that attempt to ensure predictability through extrinsic contingencies leave only one option open for the students' enjoyment: to disrupt the constraints of the system. The ultimate consequences of socializing each generation into a pattern of extrinsic motivation (and the deviance which accompanies it) are at present incalculable, but cannot fail to be severe.

A second solution is to strengthen the means-end connection between adherence to school constraints and achievement of desired future goals. If all students could be certain that their futures depended on school performance, at least the extreme forms of disruption would be minimized. Such an expectation, however, would be unrealistic at present. High schools provide a sorting function for a minority of students interested in future academic or professional careers. For the rest, there is no clear connection between performance in school and future success. Moreover, a substantial proportion of youth must realistically feel their chances of success in school to be limited. In academic competition with better prepared middle-class students, ghetto teenagers suspect that participation in the school system will not add appreciably to their chances of achieving desirable life goals. Hence, adherence to its constraints becomes

futile, at least in terms of means-end motivation. To change this state of affairs, a closer correspondence between school performance and future rewards needs to be instituted. This is a difficult but not impossible strategy. It has the same disadvantage as the previous solution: in laying emphasis on external contingencies -- in this case future rewards -- it trains youth to be extrinsically motivated, and it disregards the need for enjoyable involvement in the present.

A third line of solution is to keep in mind that intrinsic motivation is necessary for spontaneous involvement in a system, and to start transforming schools accordingly. This is, of course, a task that is at least as difficult and demanding of monies and energy as the previous ones are. What recommends this solution is that it lacks the side effects of the other two; in fact, in addition to reducing school crime, it has the promise of socializing youth into a pattern of action with long-term societal benefits. People who learn to find enjoyment in work will presumably be less dependent as adults on extrinsic sources of reward, thereby reducing the heavy burden of material bribes we now use to keep ourselves alive and more or less awake. The future ecological crisis, of which we are barely becoming aware, is to a large extent

caused by our increasing need to get symbolic material rewards as compensation for work and life activities that have lost their intrinsic meaning and no longer provide enjoyment (Csikszentmihalyi, 1975b, 1976b). If schools made their main goal teaching youth how to enjoy life, they would help accomplish the ultimate task of human liberation: to free people from addiction to extrinsic rewards.

It is this positive goal of teaching how to make life enjoyable that should direct the action of educators, and not the negative goal of reducing school crime. The latter problem will be solved along the way.

At this point, the reader will surely expect some detailed suggestions as to how to reach such a goal. It would be dishonest on our part to pretend to have solutions ready to be applied. Our purpose has been to diagnose what we believe are the roots of the problem and indicate the general shape of what might be its solution. It would take the combined effort of communities, teachers, and administrators, as well as researchers, to begin translating these abstract concepts into practice.

But, in order to avoid possible misunderstandings, it might be useful to clarify what our research suggests about what it takes to teach making life enjoyable. In the

first place, it most definitely does not mean that schools ought to amuse, entertain, coddle, or give pleasure. Although such experiences can be enjoyable, their positive effect is usually weak and rarely lasts long, and so their motivational power is unreliable. In a recent study, for instance, it was found that when high school students were beeped randomly with an electronic pager during an average week, they reported the least positive experience while they were watching television, although this was for them a voluntary and frequent -- 11 percent of waking hours -- activity (Csikszentmihalyi, Larson, & Prescott, 1977).

On the contrary, enjoyable experiences that provide sustained intrinsic motivation are characterized by challenges that require utmost extension of a person's skills and, in so doing, provide a feeling of mastery and growth. In principle, any activity could serve to produce flow experiences: there is nothing in the present curriculum of schools that is inherently inimical to flow. Learning Latin or trigonometry can be enjoyable. The crucial thing, however, is that emphasis should be not on the mastery of the subject matter, but on the process of mastery itself. The important point is not that

students learn trigonometry, but that they learn to enjoy the act of learning. The more different symbolic media students learn to use in an intrinsically motivated way, the more able they will be to restructure everyday life so that it provides flow, and the less dependent they will be on extrinsic motivation to give meaning and purpose to life. So the key for making schools enjoyable is not to be found in curricular changes, although those might also be indicated. The solution lies more in a change in the goals of instruction.

While curriculum is not inherently an obstacle to flow, the organizational constraints of school systems are almost ideally suited to depriving students of any opportunity to experience enjoyment. As education becomes increasingly rationalized and centralized, students' chances to structure their activity, to feel free and in control, decrease in proportion. It seems inevitable that the trend toward making the school experience more predictable must be reversed if we are to develop intrinsically motivated students. If strict schedules, unbending rules, and impersonal teaching situations continue to prevail, schools will have to rely even more heavily on extrinsic contingencies to survive, and in the process they will breed new

generations of bored, alienated adults for whom violence is a logical way to assert their existence.

Within these fairly general parameters, the flow model suggests a theoretical model from which concrete policies could be derived. The work of systematically generating and implementing such policies is going to be difficult and frustrating. Yet it seems to be the only viable alternative.

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